

DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: HAWAHAN ISLANDS
DESCRIPTIVE REPORT.
Hydrographic Neet No. (3) 4459
LOCALITY
Molokai
Papohaku Roadstead
.1
1925
CHIEF OF PARTY:
R.W. Woodworth

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET # 2.

of

PAPOHAKU

Molokai Island , Terr.of Hawaii Scale : 1 - 5000

R.W. Woodworth , Jr. H&G. Eng. Chief of Party.

PROJECT : Surveys of Anchorages

INSTRUCTIONS : November 26,1924.

DESCRIPTIVE REPORT to accompany HYDRO.SH.#3.

PAPOHAKU, Molokai I.

DESCRIPTION of LOCALITY: The 100' hill, called Puu o Kaiaka, topped by Libby-McNeill-Libby's loading tower, is the outstanding feature of the west coast of Molokai. The black cliffs of the hill separate two stretches of white sand beach, a long one to the south and a shorter stretch to the north.

FACILITIES for STEAMERS: The four mooring buoys are so close in to the cliff that steamers can not make fast to them except during periods of light swell. Their positions are liable to change thru dragging by steamers, as the anchors holding them are not sufficiently heavy, nor the bottom of good holding qualities. As sea and wind condittions change very rapidly in the locality, steamers are sometimes forced by increasing swell to abandon loading operations. During the midsummer months only is Papohaku reasonably safe to use by steamers.

Freight is handled by means of conveyors running along a wire cable stretching from tower to ship, the power being supplied by a winch ashore.

SURVEY METHODS: This survey was made by handlead from a whaleboat propelled by oars. The lead was used in a chair built over the bow, and angles taken within one meter of the leadsman as the lead-line was up & down.

Control was by sextant fix on shore signals located by triangulation and plane-table traverse.

The whaleboat of necessity had to be beached, due to the lack of a harbor and the fact that surf soctimes broke out to the mooring buoys. Operating in this way, but two days were possible of sounding during the three weeks the boat was at Papohaku.

The close inshore soundings desired by Libby-McNeill-Libby, with a view to mooring barges, during the summer months, under the cliff, were not possible to obtain.

Respectfully, submitted

Woodworth, Jr. Had. En. Chief of Party

1925.

STATISTICS SHEET # 3.

DATE	DAY	VOL.	POSITIONS	SOUNDINGS	MILES STAT.	BOAT
March 7,1925	2 .	1	13	37	0.5	Whaleboat
* 12, *	ъ	H	172	409	8,5	, п
•	TO	TALS =	185	446	9.0	

Unit for soundings = feet.

Location of tide gauge: Honolulu, T.H. (An attempt was made to establish a gauge at Papohaku, but due to a 10-15 foot surge along the cliff, over which a pipe was suspended, the readings obtained with the float-and-rod inside the pipe were of no value.)

Plane of reference (MLLW).

Tide reducers were taken from the predeicted heights for
Honolulu, using an additive correction of 0.5', this
being the apparent difference between predicted and
gauge heights for this port. The reducers were entered
to even feet only, as the soundings taken at Papohaku
were all obtained during periods of swell sufficiently high to render closer reduction unnecessary.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in

volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4459

Locality: Papahaka, Holokai I sland, T. H.

Chief of Party: R. W. Woodwarth in 1925.

Plane of reference is mean lower low water and is 5.5 ft. on tide staff at Monolulu, Territory of Hawaii

For reduction of soundings, condition of records satisfactory except as checked below:

- 1. Locality and sublocality of survey omitted.
- 2. Month and day of month omitted
- 3. Time meridian not given at beginning of day's work.
- 4. Time (whether A. M. or P. M.) not given at beginning of day's work.
- 5. Soundings (whether in feet or fathoms) not clearly shown in record.
- 6. Leadline correction entered in wrong column.
- 7. Field reductions entered in "Office" column.
- 8. Location of tide gauge not given at beginning of each day's work.
- 9. Leadline corrections not clearly stated.
- 10. Kind of sounding tube used not stated.
- 11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
- 12. Legibility of record could be improved.
- 13. Remarks.

Chief. Division of Tidos and Currents.

ADDRESS THE DIRECTOR U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

September 22, 1925.

Verification of

HYDROGRAPHIC SHEET 4459

This sheet was clean and well protracted. The time intervals were carefully adhered to.

The boats headings were not given in the sounding records.

The names of the signals were not given on every page, the word name being used instead.

One minute and one half minute intervals were used for soundings between 2 and 4 fathoms when the 20 second interval should have been used..

The beginning and ending of all lines were not given in the records.

H. R. Edmonston.

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ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 4-DAM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

washington September 24, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4459

Papohaku Roadstead, Molokai, H. I.

Surveyed in 1925.

Instructions dated November 26, 1925.

Chief of Party, R. W. Woodworth.

Surveyed by R. W. Woodworth.

Protracted and soundings plotted by J. D. Torrey.

Verified and inked by H. R. Edmonston.

 The records conform to the requirements of the General Instructions except in the following respects:

Boats' courses were omitted throughout.

The word "Same" was freely used when there was no change in objects. This is not good practice, and in all cases the names of the objects should appear at the top of the page.

- 2. The plan and character of the development conform to the requirements of the General Instructions, except for the omission of cross check sounding lines.
- 3. The plan and extent of development satisfy the specific instructions except that, as noted in the descriptive report, it was not possible to obtain shoal inshore soundings desired by local interests.
- 4. There are no sounding line crossings, but there is good agreement between close parallel lines.
- 5. The usual field plotting was done by the field party. The smooth sheet was lost in the office before being inked, and it was necessary, therefore, to replot the work in the office from the original records.

H. 4459 - 2

- There is no adjoining hydrographic survey.
- 7. The development is very complete and no additional surveying is required.
- The character and scope of the surveying are ameliant. very good
- 9. Reviewed by E. P. Ellis, September, 1925.

Approved-AZS. LOZ.

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. (3) 4459
State Terr.of Hawaii
General locality Molokai Island
Locality Papohaku Roadstead
Chief of party R.W.Woodworth
Surveyed by R.W.Woodworth
Date of survey March 1925.
Scale . 1: 5000
Soundings in . feet
Plane of reference MLLW J.W. Torry
Protracted by . Thatnate. Soundings in boncil by
Inked by Verified by
Records accompanying sheet (check those forwarded):
Des. report, Tide books, Marigrams,1 Boat sheets,
1 Sounding books, Wire-drag books, Photographs.
Data from other sources affecting sheet

Remarks: